

DEC 13 2000

K00 3144

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510(k) Summary of Safety and Effectiveness

| | |
|-----------------------------------|--|
| Device Name | Model 205GE-64: Pathway MRI™ Carotid Array Coil |
| Applicability | Compatible with GE Signa 1.5T MRI systems with Phased Array option |
| Reason for 510(k) | New device |
| Classification Name | Magnetic Resonance Diagnostic Device |
| Device Classification Panel | Radiology |
| Device Classification Number | 892.1000 |
| Product Code | 90MOS |
| Common Name | Magnetic Resonance Specialty |
| Proprietary Name | Model 205GE-64: Pathway MRI™ Carotid Array Coil |
| Establishment Registration Number | 2183683 |
| Address of MFG Facility | Device manufactured by: IGC-Medical Advances Inc. 10437 Innovation Drive Milwaukee: WI 53226 U.S.A. Contact: Thomas E. Tynes, Director of Operations 414.258.3808 Ext. 407 |

Points of Contact

IGC-Medical Advances Inc.
Thomas E. Tynes
Director of Operations
414.258.3808 Ext. 407

Pathway MRI™, a Pathway Medical Technologies
Company
Louise C. Myers
Vice President, Regulatory Affairs
425.497.0372

Classification

Class II

Intended Uses

Diagnostic Uses

2D, 3D imaging, proton density, T1 and T2
weighted imaging. 2D, 3D time of flight, phase
contrast imaging.

Anatomic Regions

Head: Orbits, inner ear structures,
Temporomandibular joint
Upper Neck: Targeted MRA, bifurcation of the
carotid artery
Upper Extremities: Small joints, bones, and
peripheral nerves of the elbow, hand, and wrist
Lower Extremities: Small joints and peripheral
nerves of the ankle, foot, toes, and Achilles Tendon
Pediatric applications

Standards

Performance Standards

None Established under Section 514

Voluntary Safety Standards

| | |
|-----------|--|
| UL 2601-1 | Medical Electrical Equipment, Part 1: General Requirements for Safety |
| UL 94 | Tests for Flammability of Plastic Materials |
| IEC 601-1 | General Safety Requirements for Medical Electrical Equipment |
| CPAI-84 | Specification for Flame Resistant Material Used in Camping Tentage |

Overview

The Radiology Devices Panel considered potential concerns regarding the safe and effective operation of Magnetic Resonance Diagnostic Devices when they recommended reclassification to Class II on July 27, 1987. After reclassification, the FDA's Center for Devices and Radiological Health (CDRH) released a draft guidance document for the content and review of Magnetic Resonance Diagnostic Device premarket notification submissions that offered clarification of these concerns. Due to considerable technological advances in MRDDs, CDRH issued an updated guidance document on November 14, 1998. The following is a summary of the information contained within this premarket notification that addresses these concerns:

The GE 1.5T Signa MRI system operated with the Pathway MRI™ Carotid Array Coil is substantially equivalent to the same system operated with the legally marketed predicate devices listed in section 4.0, within the Class II definition of Magnetic Resonance Diagnostic Device with respect to the safety parameter action levels:

Safety Parameters

| | |
|---|-----------|
| Maximum Static Magnetic Field: | No change |
| Rate of Magnetic Field Strength Change: | No change |
| RF Power Deposition: | No change |
| Acoustic Noise Levels: | No change |
| Biocompatibility: | No change |

Imaging Performance Parameters

| | |
|-----------------------------------|-----------|
| Specification Volume: | No change |
| Signal-to-Noise Ratio: | No change |
| Image Uniformity: | No change |
| Geometric Distortion: | No change |
| Slice Thickness and Gap: | No change |
| High Contrast Spatial Resolution: | No change |

General Safety and Effectiveness Concerns

The device contains instructions for use. It includes indications for use, precautions, cautions, contraindications, warnings and quality assurance testing. This information assures safe and effective use of the device.

Substantial Equivalence Summary

The GE 1.5T Signa MRI system operated with the Pathway MRI™ Carotid Array Coil addressed in this PMN, has the same intended use and technological characteristics as the same system operated with the identified legally marketed predicate devices. The use of these coils does not affect the GE Signa system safety parameter specifications.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

DEC 13 2000

Food and Drug Administration
9200 Corporate Boulevard
Rockville MD 20850

Mr. Thomas E. Tynes
Director of Operations
IGC-Medical Advances, Inc.
10437 Innovation Drive
MILWAUKEE, WI 53226

Re: K003144
Model 205 Series: Pathway MRI™
Carotid Array Coil
Dated: October 9, 2000
Received: October 10, 2000
Regulatory Class: II
21 CFR §892.1000/Procode: 90 MOS

Dear Mr. Tynes:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the Current Good Manufacturing Practice requirements, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic QS inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for *in vitro* diagnostic devices), please contact the Office of Compliance at (301) 594-4639. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "<http://www.fda.gov/cdrh/dsma/dsmamain.html>".

Sincerely yours,

Daniel G. Schultz, M.D.
Captain, USPHS
Acting Director, Division of Reproductive,
Abdominal, and Radiological Devices
Office of Device Evaluation
Center for Devices and Radiological Health

Enclosure (s)

510(k) Number (if known): K003144

Device Name: Model 205GE-64: Medical Advances Pathway MRI™ Carotid Array Coil

Indications for Use:

Magnetic resonance imaging (MRI) and magnetic resonance angiography (MRA) of the Head: Orbits, inner ear structures, Temporomandibular joint. Upper Neck: Targeted MRA, bifurcation of the carotid artery. Upper Extremities: Small joints, bones, and peripheral nerves of the elbow, hand, and wrist. Lower Extremities: Small joints and peripheral nerves of the ankle, foot, toes, and Achilles Tendon. Pediatric applications.

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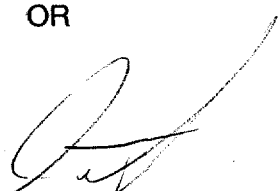
Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use ✓
(Per 21 CFR 801.109)

OR

Over-The-Counter Use

(Optional Format 1-2-96)



(Division Sign-Off)
Division of Reproductive, Abdominal, ENT,
and Radiological Devices

510(k) Number K003144